



I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 8-16-05 Signature: Maura A. Gallagher
(Maura A. Gallagher)

Docket No.: CSHL-P02-010
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Hannon et al.

Application No.: 09/866557

Confirmation No.: 4804

Filed: May 24, 2001

Art Unit: 1637

For: METHODS AND COMPOSITIONS FOR
RNA INTERFERENCE

Examiner: C. B. Wilder

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Supplemental Information Disclosure Statement is filed before the mailing date of a first Office Action after the filing of a Request for Continued Examination under 37 CFR 1.114 (37 CFR 1.97(b)(4)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other

material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Supplemental Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Supplemental Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. CSHL-P02-010. A duplicate copy of this paper is enclosed.

Dated: August 16, 2005

Respectfully submitted,

By 
Jennifer Holmes

Registration No.: 46,778
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/866557
				Filing Date	May 24, 2001
				First Named Inventor	Scott Hammond
				Art Unit	1637
				Examiner Name	Wilder, C. B.
Sheet	1	of	3	Attorney Docket Number	CSHL-P02-010

CA.U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	2005/0164210	07-28-2005	Mittal et al.	

CBFOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	WO 04/029219	04-08-2004	Fridman et al.		
	BB	WO 00/44914	08-03-2000	Li et al.		
	BC	WO 01/29058	04-26-2001	Mello et al.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	Ambros V, Dicing Up RNAs, Science 293: 811-813 (2001).	
	CB	Bernstein E, et al., The rest is silence, RNA 7(11):1509-21 (2001).	
	CC	Bernstein E, et al., Role for a bidentate ribonuclease in the initiation step of RNA interference, Nature 409(6818):363-6 (2001).	
	CD	Bernstein E, et al., Dicer is essential for mouse development, Nat Genet. 35(3):215-7 (2003); Epub 2003 Oct 5.	
	CE	Carmell MA, et al., The Argonaute family: tentacles that reach into RNAi, developmental control, stem cell maintenance, and tumorigenesis, Genes Dev. 16(21):2733-42 (2002).	
	CF	Carmell MA, et al., Germline transmission of RNAi in mice, Nat Struct Biol. 10(2):91-2 (2003).	
	CG	Carmell MA, et al., RNase III enzymes and the initiation of gene silencing, Nat Struct Mol Biol. 11(3):214-8 (2004).	
	CH	Caudy AA, et al., Fragile X-related protein and VIG associate with the RNA interference machinery, Genes Dev. 16(19):2491-6 (2002).	
	CI	Caudy AA, et al., A micrococcal nuclease homologue in RNAi effector complexes, Nature 425(6956):411-4 (2003).	
	CJ	Caudy AA, et al., Induction and biochemical purification of RNA-induced silencing complex from Drosophila S2 cells, Methods Mol Biol. 265:59-72 (2004).	
	CK	Cleary MA, et al., Production of complex nucleic acid libraries using highly parallel in situ oligonucleotide synthesis, Nat Methods. 1(3):241-8 (2004); Epub 2004 Nov 18.	
	CL	Crooke, ST, Basic Principles of Antisense Therapeutics. Antisense Research and Application (1998), Chapter 1, Springer-Verlag, New York.	
	CM	Denli AM, et al., RNAi: an ever-growing puzzle, Trends Biochem Sci. 28(4):196-201 (2003).	
	CN	Denli AM, et al., Processing of primary microRNAs by the Microprocessor complex, Nature. 432(7014):231-5 (2004); Epub 2004 Nov 7.	
	CO	Fraser A., Human Genes Hit the Big Screen, Nature 428: 375-378 (2004).	
	CP	Gupta S, et al., Inducible, reversible, and stable RNA interference in mammalian cells, Proc	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

9796841_1.DOC



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO			Complete if Known		
			Application Number	09/866557	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	May 24, 2001	
			First Named Inventor	Scott Hammond	
			Art Unit	1637	
			Examiner Name	Wilder, C. B.	
			Attorney Docket Number	CSHL-P02-010	
Sheet	2	of	3		
(Use as many sheets as necessary)					

		Natl Acad Sci USA 101(7):1927-32 (2004); Epub 2004 Feb 4.	
CQ		Hammond SM, et al., Post-transcriptional gene silencing by double-stranded RNA, Nat Rev Genet. 2(2):110-9 (2001).	
CR		Hannon GJ, RNA interference, Nature 418(6894):244-51 (2002).	
CS		Hannon GJ, et al., RNA interference by short hairpin RNAs expressed in vertebrate cells, Methods Mol Biol. 257:255-66 (2004).	
CT		Hannon GJ, et al., Unlocking the potential of the human genome with RNA interference, Nature. 431(7006):371-8 (2004).	
CU		He L, et al., MicroRNAs: small RNAs with a big role in gene regulation, Nat Rev Genet. 5(7):522-31 (2004).	
CV		He L, et al., A microRNA polycistron as a potential human oncogene, Nature 435(7043):828-33 (2005).	
CW		Hemann MT, et al., An epi-allelic series of p53 hypomorphs created by stable RNAi produces distinct tumor phenotypes in vivo, Nat Genet. 33(3):396-400 (2003); Epub 2003 Feb 3.	
CX		Jackson, AL, et al., Expression profiling reveals off-target gene regulation by RNAi, Nature Biotechnology 21(6), 635-638 (June 2003).	
CY		Ketting, RF, et al., Dicer functions in RNA interference and in synthesis of small RNA involved in developmental timing in <i>C. elegans</i> , Genes Dev 15, 2654-2659. (Oct 15, 2001).	
CZ		Lee, YS, et al., Distinct Roles for Drosophila Dicer-1 and Dicer-2 in the siRNA/miRNA Silencing Pathways, Cell 117, 69-81 (Apr 2, 2004).	
CA1		Liu J, et al., Argonaute2 is the catalytic engine of mammalian RNAi, Science 305(5689):1437-41 (2004); Epub 2004 Jul 29.	
CB1		Liu J, et al., MicroRNA-dependent localization of targeted mRNAs to mammalian P-bodies, Nat Cell Biol. 7(7):719-23 (2005); Epub 2005 Jun 5.	
CC1		Lund E, et al., Nuclear Export of MicroRNA Precursors, Science 303, 95-98 (Jan 2, 2004).	
CD1		McCaffrey AP, et al., RNA interference in adult mice, Nature 418(6893):38-9 (2002).	
CE1		Murchison EP, et al., miRNAs on the move: miRNA biogenesis and the RNAi machinery, Curr Opin Cell Biol. 16(3):223-9 (2004).	
CF1		Novina, CD et al., The RNAi Revolution, Nature 430: 161-164 (2004).	
CG1		Paddison PJ, et al., RNA interference: the new somatic cell genetics?, Cancer Cell. 2(1):17-23 (2002).	
CH1		Paddison PJ, et al., siRNAs and shRNAs: skeleton keys to the human genome, Curr Opin Mol Ther. 5(3):217-24 (2003).	
CI1		Paddison PJ, et al., Short hairpin activated gene silencing in mammalian cells, Methods Mol Biol. 265:85-100 (2004).	
CJ1		Paddison PJ, et al., A resource for large-scale RNA-interference-based screens in mammals, Nature 428(6981):427-31 (2004).	
CK1		Paddison PJ, et al., Stable suppression of gene expression by RNAi in mammalian cells, 99(3):1443-1448 (2002).	
CL1		Paddison PJ, et al., Short hairpin RNAs (shRNAs) induce sequence-specific silencing in mammalian cells, Genes & Development 16:948-958 (2002).	
CM1		Paroo, Z, et al., Challenges for RNAi in vivo, TRENDS in Biotechnology 22: 390-394 (2004).	
CN1		Pham JW, et al., A Dicer-2-Dependent 80S Complex Cleaves Targeted mRNAs during RNAi in Drosophila, Cell 117, 83-94 (Apr 2, 2004).	
CO1		Qi Y, et al., Biochemical Specialization within Arabidopsis RNA Silencing Pathways, Mol Cell. 19(3):421-8 (2005).	
CP1		Rivas FV, et al., Purified Argonaute2 and an siRNA form recombinant human RISC, Nat Struct Mol Biol. 12(4):340-9 (2005); Epub 2005 Mar 30.	
CQ1		Schramke V, et al., RNA-interference-directed chromatin modification coupled to RNA polymerase II transcription, Nature 435(7046):1275-9 (2005); Epub 2005 Jun 19.	
CR1		Silva JM, et al., RNA interference: a promising approach to antiviral therapy?, Trends Mol	
Examiner Signature		Date Considered	



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/866557
				Filing Date	May 24, 2001
				First Named Inventor	Scott Hammond
				Art Unit	1637
				Examiner Name	Wilder, C. B.
Sheet	3	of	3	Attorney Docket Number	CSHL-P02-010

		Med. 8(11):505-8 (2002).	
	CS1	Silva JM, et al., Free energy lights the path toward more effective RNAi, Nat Genet. 35(4):303-5 (2003).	
	CT1	Silva J, et al., RNA-interference-based functional genomics in mammalian cells: reverse genetics coming of age, Oncogene. 23(51):8401-9 (2004).	
	CU1	Silva JM, et al., RNA interference microarrays: high-throughput loss-of-function genetics in mammalian cells, Proc Natl Acad Sci USA. 101(17):6548-52 (2004); Epub 2004 Apr 14.	
	CV1	Silva JM, et al., Second-generation shRNA libraries to the mouse and human genomes, unpublished manuscript	
	CW1	Siolas D, et al., Synthetic shRNAs as potent RNAi triggers, Nat Biotechnol. 23(2):227-31 (2005); Epub 2004 Dec 26.	
	CX1	Song JJ, et al., The crystal structure of the Argonaute2 PAZ domain reveals an RNA binding motif in RNAi effector complexes, Nat Struct Biol. 10(12):1026-32 (2003); Epub 2003 Nov 16.	
	CY1	Song JJ, et al., Crystal structure of Argonaute and its implications for RISC slicer activity, Science 305(5689):1434-7 (2004); Epub 2004 Jul 29.	
	CZ1	Svoboda P, et al., RNAi and expression of retrotransposons MuERV-L and IAP in preimplantation mouse embryos; Dev Biol. 269(1):276-85 (2004).	
	CA2	Tabara H, et al., The dsRNA Binding Protein RDE-4 Interacts with RDE-1, DCR-1, and a DExH-Box Helicase to Direct RNAi in C. elegans, Cell 109, 861-871. (Jun 28, 2002).	
	CB2	Tomari Y, et al., RISC Assembly Defects in the Drosophila RNAi Mutant armitage, Cell 116, 831-841 (Mar 19, 2004).	
	CC2	Ui-Tei, K. et al., Sensitive Assay of RNA Interference in Drosophila and Chinese Hamster Cultured Cells Using Firefly Luciferase Gene as Target, FEBS Letters 479: 79-82 (2000).	
	CD2	Zhang H, et al., Human Dicer preferentially cleaves dsRNAs at their termini without a requirement for ATP, The Embo Journal, 21, 5875-5885. (Nov 1, 2002).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
--------------------	--	-----------------	--